

L5 ANSWER 46 OF 97 CA COPYRIGHT 2001 ACS  
AN 109:42597 CA  
TI Lightweight molded **calcium silicate** for thermal  
insulators  
IN Tsuchimoto, Yasushi; Yoko, Hisanori; Nishiyama, Tatsuo; Kubota, Kazuo  
PA Nichias Corp., Japan  
SO Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C04B028-18  
ICI C04B028-18, C04B014-38, C04B016-02  
CC 57-6 (Ceramics)  
FAN.CNT 1

|    | PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|----|--|------|----------|-----------------|----------|
| PI | JP 63074949  | A2   | 19880405 | JP 1986-219173  | 19860919 |
| AB | The title products are manufd. from milk of <b>lime</b> having pptn. vol. 350-450 mL, siliceous material, alkali-resistant inorg. fibers, pulp fiber (2-8 wt.%), and fibrous <b>wollastonite</b> (10-30 wt.%). Milk of <b>lime</b> (pptn. vol. 420 mL) 420 was mixed with <b>diatomaceous earth</b> 37.5, bentonite 15, water 510, pulp fiber 3.5, alkali-resistant glass fibers 2, and fibrous <b>wollastonite</b> 15 parts, and the slurry was reacted for 9 h under stirring, press molded, and autoclaved to give a tobermorite-based test piece having bending strength 7.5 kg/cm <sup>2</sup> and shrinkage 0.51% vs. 6.3 kg/cm <sup>2</sup> and 1.25% for one made without <b>wollastonite</b> . When it was heated at 650.degree., no cracking was obsd. |      |          |                 |          |
| ST | <b>calcium silicate thermal insulator</b><br><b>wollastonite</b> ; tobermorite thermal <b>insulator</b> glass fiber;<br>cellulose pulp tobermorite thermal <b>insulator</b>  |      |          |                 |          |

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